

Appendix 4: Methodologic quality of the included studies of school-based physical-activity interventions

Study	Criteria defined*	Intervention clearly described	Basis for intervention†	Power calculation‡	Method of randomization described	Blinded outcome assessment	Baseline characteristics similar	Attrition rate described	Statistical analysis§
Burke et al. ³⁴	No	Yes	No	Yes	Yes	No	Not described	Yes	No
Carrel et al. ⁴¹	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes
Chavarro et al. ³⁵	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes
Coleman et al. ⁴⁸	No	Yes	Yes	No	No	No	More girls at risk for overweight in intervention group	Yes	Yes
Donnelly et al. ⁴⁶	No	Yes	Yes	Yes	NA	No	Yes	No	Yes
Hopper et al. ³⁰	No	Yes	Yes	No	No	No	Not described	No	Yes
Kain et al. ⁴²	Yes	Yes	Yes	Done post hoc	NA	No	More obese children in intervention group	Yes¶	Yes
Linden et al. ³⁶	Yes	Yes	No	No	NA	No	Yes	Yes	Yes
Lohman et al. ⁴⁵	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Luepker et al. ³¹	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
MacKelvie et al. ⁴³	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes
MacKelvie et al. ⁴⁴	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes
Neumark-Sztainer et al. ³⁷	Yes	Yes	Yes	No	Yes	No	More whites in intervention; more Asians in control	Yes	Yes
Pate et al. ³⁸	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes
Sallis et al. ⁴⁷	Yes	Yes	No	No	No	No	Not described	Yes	Yes
Spiegel et al. ³⁹	No	Yes	Yes	No	NA	No	Not described	No	Yes
Stock et al. ⁴⁰	No	Yes	No	No	NA	Yes	Yes	No	Yes
Webber et al. ⁴⁹	Yes	Yes	Yes	Yes	Yes	Yes	Not described	No	Yes

Note: NA = not applicable.
*Inclusion and exclusion criteria.
†Theoretical basis for the intervention reported.
‡Done during the study design stage.
§Statistical analysis reproducibly described.
¶Attrition rate 9% in the intervention group, 21% in the control group.